

November 12, 2003 F/PIC:FAP:FLF
CR0308-1.FAP

CRUISE REPORT

VESSEL: *Oscar Elton Sette*, Cruise 03-08 (OES-09)

CRUISE PERIOD: October 1-23, 2003 for a total of 23 sea days

AREA OF OPERATION: Northwestern Hawaiian Islands (Fig. 1)

TYPE OF OPERATION: The NOAA ship *Oscar Elton Sette* will be engaged as support for the Pacific Island Fisheries Science Center (PIFSC), National Marine Fisheries Service NMFS), NOAA. Operations were focused on obtaining specimens and recovering archival gear (Table 1).

ITINERARY:

October 1	Departed Guam and transited to French Frigate Shoals (FFS).
October 13	Arrived FFS. Embarked Ray Boland, Frank Parrish, Brian Greene, Doug Kesling, Dave Pence, Robert Dollar, and Gerard Jardin.
October 12-18	Conducted diving and trawling operations at FFS and Brooks Banks.
October 19	Made dives at Necker Bank.
October 20	Conducted fishing operations at WestPac Bank.
October 21	Diving operations conducted at Nihoa.
October 22	Diving operations conducted at Niihau.
October 23	Arrived Snug Harbor. All disembarked. End of cruise.

MISSIONS AND RESULTS:

- A. Fatty acid collections. To the degree feasible, the last of the shallow reef and slope specimens were collected for the fatty acid reference library. Methods of collection included trawling of the deep slope sand fields for sand fauna and divers using pole spears in the shallow reefs.
1. Three of the trawls were focused on the north terrace of FFS and one was conducted on the flanks of Nihoa. The gear used was a bottom shrimp trawl with a 12-ft mouth. Depths sampled were between 80 and 120 m. A time-depth recorder placed on the net indicates the net descends and rises at 2.8 meters/minute using the aft capstan to haul the trawls. All fish caught were measured and weighed for ECOPATH biomass estimates (Table 2).
 2. Divers using spears finished the collection of the sand wrasses known from CRITTERCAM video to be a seal prey item. Of all the species collected these are considered the most difficult because they swim in water and under the sand.
- B. Recovery of archival monitors
1. At FFS, Brooks, and Necker thermographs (N=5) deployed in the prior year were changed out. The recorders were situated between 40 and 80 meters deep.
 2. At FFS and Brooks Bank seal foraging sensors (N=18) deployed in known foraging corridors were recovered from 80 m using mixed gas divers.

**SCIENTIFIC
PERSONNEL:**

Frank Parrish, Chief Scientist, Pacific Island Fisheries Science Center (PIFSC), National Marine Fisheries (NMFS)
 Raymond Boland, Research Biologist, PIFSC, NMFS
 Brian Greene, Research Assistant, Joint Institute for Marine and Atmospheric Research (JIMAR), University of Hawaii (UH)
 Robert Dollar, Fishery Biologist, PIFSC, NMFS
 Gerard Jardin, Sea level Engineer, JIMAR, UH
 Doug Kesling, Cooperating Scientist, NURC, NURP
 Dave Pence, Cooperating Scientist, UH

Submitted by: (/s/Frank A. Parrish)

 Frank A. Parrish
 Chief Scientist

Approved by: (/s/George Antonelis) for

Jeffrey J. Polovina
Acting Director
Pacific Islands Fisheries Science Center

Attachments

Figure 1.--Track of the NOAA ship Oscar Elton Sette Cruise OES-03-08 (OES-09), October 1-23, 2003.